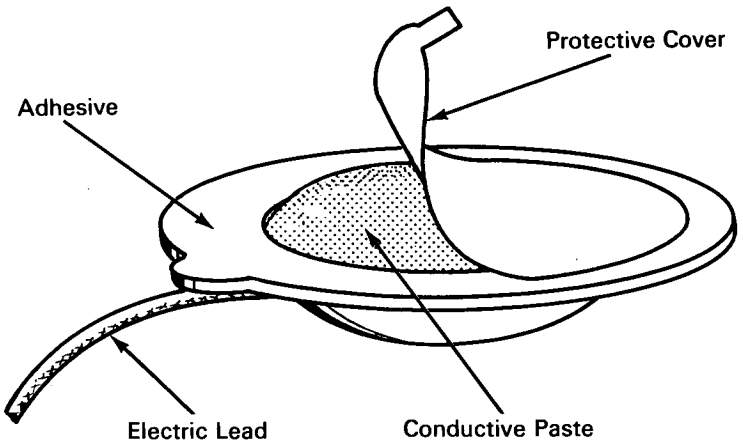
NASA TECH BRIEF

Integral Skin Electrode for Electrocardiography is Expendable



The problem:

To devise an easily attached, expendable skin electrode for use in electrocardiography. Conventional skin electrodes (disk or strip types) are relatively expensive, require the separate use of an adhesive for attachment, and must be cleaned after each application.

The solution:

An inexpensive electrode that combines an electrical contact, conductive paste, and a skin-attachment adhesive. The electrode is discarded after it is used on a patient or test subject.

How it's done:

The electrode incorporates a molded, thin-walled plastic cup filled with a conductive paste or jelly, an electric lead, and a connector for the EKG equipment. The bottom surface of the plastic cup is coated with an adhesive for attaching the electrode to the skin. A paper tear-off disk on the adhesive surface, which serves as a protective cover, is removed just before the electrode is attached to the skin.

Note:

1. The disposable electrodes, made of readily available inexpensive materials, may be mass-produced at a low unit cost.
2. Application of the electrodes does not require any other preparation than degreasing of the skin area with alcohol or other suitable solvent.
3. Inquiries concerning this invention may be directed to:

   Technology Utilization Officer
   Manned Spacecraft Center
   P.O. Box 1537
   Houston, Texas, 77001
   Reference: B66-10118

Patent status:

Inquiries about obtaining rights for the commercial use of this invention may be made to NASA, Code GP, Washington, D.C., 20546.

Source: North American Aviation, Inc.
under contract to
Manned Spacecraft Center
(MSC-299)

Category 04